



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,569	09/09/2003	George Emanuel	KSY 02655 PTUS	3413
32233	7590	01/27/2006	EXAMINER	
STORM L.L.P. BANK OF AMERICA PLAZA 901 MAIN STREET, SUITE 7100 DALLAS, TX 75202			KIM, CHRISTOPHER S	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8r

Office Action Summary	Application No. 10/658,569	Applicant(s) EMANUEL, GEORGE	
	Examiner Christopher S. Kim	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 29-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/2/05</u> <u>2/7/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Invention I, Species A in the reply filed on November 4, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 29-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention/Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 4, 2005.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore,
 - the "sharp wedge with an angle less than 45°" recited in claim 3;
 - the "sharp wedge has an angle of 20° or less" recited in claim 4;
 - the "strut has a coating" recited in claim 5;
 - the "orifice is circular" recited in claim 12;
 - the "orifice is oval" recited in claim 13;
 - the "iodine feed includes a carrier gas" recited in claim 14;

the "diameter of an injected iodine plume is equal to or less than the width of the strut" recited in claim 17;
the "at least two struts" recited in claim 18;
the "at least on fin" recited in claim 20;
the "sharp ogive" recited in claim 21;
the "carrier gas is helium" recited in claim 24;
the "carrier gas is nitrogen" recited in claim 25;
the "two struts" recited in claim 26;
the "two struts that are staggered" recited in claim 27;
the "heating element" recited in claim 28

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the preamble recites "an iodine injection system" with an intended use "for injecting iodine into a nozzle for a laser." The preamble further recites details of the nozzle and the body of the claim recites a location of "a strut" in relation to "the nozzle throat." The preamble recites a subcombination (an iodine injection system) but it appears that applicant is attempting to claim a combination (an iodine injection system and a nozzle). The claim preamble should be amended to positively recite a combination.

6. Claim 14 recites the limitation "the iodine feed" in line 1. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 23 recites the limitation "the iodine" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1-4, 6, 8, 18, 20, 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Crook (2,625,008).

Crook discloses a system comprising at least one strut 40, 42, 44 located downstream of the nozzle throat (at 20).

The preamble “iodine injection system” has been given patentable weight to the extent that it merely designates a name for the claimed invention. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not

Art Unit: 3752

depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. The preamble does not breath life into the claim.

10. Claims 1, 2, 6, 8, 10, 12, 18, 20, 21, 26, 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Goenka et al. (6,315,221).

Goenka discloses a system comprising at least one strut 40, 42, 60 located downstream of the nozzle throat 64

The preamble "iodine injection system" has been given patentable weight to the extent that it merely designates a name for the claimed invention. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. The preamble does not breath life into the claim.

11. Claims 1, 2, 6, 8, 10, 11, 12, 20, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sher et al. (2,613,999).

Sher discloses a system comprising at least one strut 2 located downstream of the nozzle throat 1

The preamble "iodine injection system" has been given patentable weight to the extent that it merely designates a name for the claimed invention. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. The preamble does not breath life into the claim.

Art Unit: 3752

12. Claims 1, 2, 6, 8, 27, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Riho (1,608,998).

Riho discloses a system comprising at least one strut 12 having a heating element 25 located downstream of the nozzle throat 10

The preamble "iodine injection system" has been given patentable weight to the extent that it merely designates a name for the claimed invention. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. The preamble does not breath life into the claim.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 7, 9, 15, 16, 17, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goenka et al. (6,315,221).

Goenka discloses the claimed invention except for claimed ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the claimed ranges in the device of Goenka for optimization, since it has been held that where the general conditions of a claim are disclosed in the

prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

15. Claims 5, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sher et al. (2,613,999).

Regarding claim 5, Sher discloses the limitations of the claimed invention except for the strut having a coating. It is well known in the art to provide a coating to prevent adhesion of the working fluid. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the strut of Sher with a coating to prevent adhesion/buildup of the working fluid.-


Regarding claims 23-25, Sher discloses the limitations of the claimed invention except for the working fluid being helium or nitrogen. Supplying helium or nitrogen to the device of Sher is merely difference in the use of the Sher's device. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided helium or nitrogen to the device of Sher to spray inert gas to prevent any chemical reactions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher S. Kim
Primary Examiner
Art Unit 3752

CK